UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/764,797	01/26/2004	Zhiping Shan	1094-47	9767

28249 7590 07/21/2008

DILWORTH & BARRESE, LLP
333 EARLE OVINGTON BLVD.
SUITE 702
UNIONDALE, NY 11553

EXAMINER	
WARTALOWICZ, PAUL A	

ART UNIT	PAPER NUMBER
1793	

MAIL DATE	DELIVERY MODE
07/21/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/764,797	SHAN ET AL.	
	Examiner	Art Unit	
	PAUL A. WARTALOWICZ	1793	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *14 May 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-3,5-23 and 25-28* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3,5-23 and 25-28* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

Applicant's arguments with respect to claims 1-3, 5-23 and 25-28 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-3, 5-23 and 25-28 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The recitation in claims 1, 14, and 25 "combining a source of an inorganic oxide with an organic complexing and pore forming agent in the absence of water" does not appear to have support in the specification pointed out by the applicant. However, it appears that the applicant has support for the limitation --combining a mixture consisting of a source of an inorganic oxide with an organic complexing and pore forming agent--.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-3, 5-11, 14-23, are rejected under 35 U.S.C. 103(a) as being unpatentable over Cao et al. (U.S. 6660682) in view of Pinnavaia et al. (U.S. 6410473).

Cao et al. teach a method of making a molecular sieve (col. 1) wherein an inorganic source comprising fumed silica, alumina, and another element (col. 2, 6) is combined with triethanolamine (col. 8) and ZSM-11 seed (col. 9, 11) at a temperature of 80-250°C in the absence of water (col. 10) wherein the template is removed by any known technique (col. 11) and then the crystal formed is calcined (col. 15) at the claimed pressure (col. 19).

Cao et al. fail to teach extracting the template with the claimed solvent.

Pinnavaia et al., however, teach a method for making a mesoporous inorganic oxide (col. 1) wherein to extract a templating agent with water for the purpose of recycling the templating agent (col. 8-9).

Therefore, it would have been obvious to one of ordinary skill in the art at the time applicant's invention was made to provide extracting a templating agent with water

in Cao et al. in order to recycle the templating agent (col. 8-9) as taught by Pinnavaia et al.

Regarding the limitation of using water to dissolve the water soluble complex, it appears that the combination of Cao et al. and Pinnavaia et al. include mixing the crystal formed from the reaction mixture (triethanolamine and inorganic oxide precursor at 80-250°C) with water which would dissolve the crystal and provide an aqueous mixture.

Regarding the limitation of the claimed X-ray diffraction pattern, it appears that the prior art of record teaches a substantially similar process as that of the claimed invention such that the properties of the product made by said prior art process are substantially similar to the properties of the product made by the claimed process.

Claims 12, 13, and 25-28 rejected under 35 U.S.C. 103(a) as being unpatentable over Cao et al. (U.S. 6660682) in view of Pinnavaia et al. (U.S. 6410473) and Ozin et al. (U.S. 5320822).

Cao et al. teach a method of making a molecular sieve (col. 1) wherein an inorganic source comprising fumed silica, alumina, and another element (col. 2, 6) is combined with triethanolamine (col. 8) and ZSM-11 seed (col. 9, 11) at a temperature of 80-250°C in the absence of water (col. 10) wherein the template is removed by any known technique (col. 11) and then the crystal formed is calcined (col. 15) at the claimed pressure (col. 19).

Cao et al. fail to teach extracting the template with the claimed solvent.

Pinnavaia et al., however, teach a method for making a mesoporous inorganic oxide (col. 1) wherein to extract a templating agent with water for the purpose of recycling the templating agent (col. 8-9).

Therefore, it would have been obvious to one of ordinary skill in the art at the time applicant's invention was made to provide extracting a templating agent with water in Cao et al. in order to recycle the templating agent (col. 8-9) as taught by Pinnavaia et al.

Regarding the limitation of using water to dissolve the water soluble complex, it appears that the combination of Cao et al. and Pinnavaia et al. include mixing the crystal formed from the reaction mixture (triethanolamine and inorganic oxide precursor at 80-250°C) with water which would dissolve the crystal and provide an aqueous mixture.

Cao et al. fail to teach using ethylene glycol as the solvent.

Ozin et al., however, teach a method of making a molecular sieve (col. 1) wherein ethylene glycol is combined with the reaction mixture comprising an amine-containing templating agent for the purpose of providing a medium for crystal formation that does not interfere with the reaction (col. 6-7).

Therefore, it would have been obvious to one of ordinary skill in the art at the time applicant's invention was made to provide ethylene glycol is combined with the reaction mixture comprising an amine-containing templating agent in Cao et al. in order to provide a medium for crystal formation that does not interfere with the reaction (col. 6-7) as taught by Ozin et al.

Regarding the limitation of the claimed X-ray diffraction pattern, it appears that the prior art of record teaches a substantially similar process as that of the claimed invention such that the properties of the product made by said prior art process are substantially similar to the properties of the product made by the claimed process.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to PAUL A. WARTALOWICZ whose telephone number is (571)272-5957. The examiner can normally be reached on 8:30-6 M-Th and 8:30-5 on Alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley Silverman can be reached on (571) 272-1358. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Wayne Langel/
Primary Examiner, Art Unit 1793

Paul Wartalowicz
July 18, 2008

Wayne Langel
Primary Examiner
A.U. 1793